

Claims

- [1] A planar inverted F antenna having a radiation patch, comprising:
a first radiation patch for radiating a signal;
a ground means for grounding the first radiation patch;
a feeding means for supplying an electric power to the first radiation patch; and
a short means having one side coupled to the first radiation patch and other side coupled to the ground means for shorting the first radiation patch, wherein the first radiation patch is an asymmetrical shape of linearly tapered rectangle and has one or more corrugated hollows.
- [2] The planar inverted F antenna of claim 1, further comprising a second radiation patch coupled to one of a length side and a width side of the first radiation patch for extending an electrical length of the first radiation patch.
- [3] The planar inverted F antenna of claim 2, wherein the second radiation patch has a length shorter than the length of the first radiation patch.
- [4] The planar inverted F antenna of claim 3, the length and a width of the second radiation patch are determined according to a desired resonant frequency.
- [5] The planar inverted F antenna of claim 4, wherein a ratio of taper in the first radiation patch, the number of corrugated hollows, the predetermined length and width of the corrugated hollows are determined according to the desired resonant frequency.